

Remarks

Reconsideration of this application as amended is respectfully requested.

Claims 1, 11, 14 and 16 stand rejected under 35 U.S.C. §102(e) in view of U.S. Patent No. 7,016,540 of *Gong et al.* ("*Gong*").

Claims 2, 4, 5, 7-10, 18, 19, and 21 stand rejected under 35 U.S.C. §103(a) in view of *Gong* and U.S. Patent Publication 2003/0210886 of *Li et al.* ("*Li*").

Claims 3, 6, 13, 15, 20, and 22 stand rejected under 35 U.S.C. §103(a) in view of *Gong* and U.S. Patent Publication 2004/0125877 of *Chang et al.* ("*Chang*").

Claims 12 and 17 stand rejected under 35 U.S.C. §103(a) in view of *Gong* and U.S. Patent No. 6,711,587 of *Dufaux* ("*Dufaux*").

Claims 1-22 are cancelled.

New claims 23-48 are added.

It is respectfully submitted that new claim 23 is not anticipated by *Gong* because *Gong* does not disclose extracting key-frames from a video by detecting multiple types of meaningful content in the video using a set of different analyses performed in parallel on each video frame in the video as claimed in new claim 23. Instead, *Gong* teaches extracting key-frames from a video by detecting differences among video frames using only one analysis on the video frames - namely a singular value decomposition (SVD) of a color histogram matrix A of the video frames. (*Gong*, col. 7, lines 6-24 and col. 11, lines 41-50).

Given that new claims 24-35 depend from new claim 23, it follows that new claims 24-35 are not anticipated by *Gong*.

Given that new claims 36-48 include limitations similar to the limitations of new claim 23, it follows that new claims 36-48 are not anticipated by *Gong*.

Applicant also submits that new claims 23-48 are not obvious in view of *Gong* and *Li* and *Chang* and *Dufaux*. Applicant has shown that *Gong* does not disclose extracting key-frames from a video by detecting multiple types of meaningful content in the video using a set of different analyses performed in parallel on each video frame in the video as claimed in new claims 23-48.

Li teaches performing a set of different analyses on video frames ("Skin Color Detection," "No. Of Faces," "Edge Energy," "Motion Activity" in Fig. 1c of *Li*) but does not teach selecting a set of candidate key-frames using each analysis and then clustering and then selecting key-frames from the clusters of candidate key-frames as claimed in new claims 23-48. Instead, *Li* teaches selecting key-frames using a combined metric (importance value IMF_i) from the different analyses of the video frames (*Li*, paragraphs 62-65). The individual analyses shown in Fig. 1c of *Li* do not themselves individually yield a set of candidate key-frames which are then arranged into clusters from which final key-frames are selected as claimed in new claims 23-48. Instead, the individual analyses shown in Fig. 1c of *Li* yield a Frame Importance Value (IMF_i) as shown in Fig. 1c of *Li* and described in paragraph 62 of *Li*.

Chang merely discloses key-frames for shots that share a common theme (*Chang*, paragraph 190) rather than extracting key-frames as claimed in new claims 23-48.

Dufaux teaches selecting key-frames from a set of video frames using a face detection analysis (*Dufaux*, col. 2, lines 5-7) rather than extracting key-frames from a video by detecting multiple types of meaningful content in the video using a set of different analyses performed in parallel on each video frame in the video as claimed in new claims 23-48.

It is respectfully submitted that in view of the amendments and arguments set forth above, the applicable objections and rejections have been overcome.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 08-2025 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

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